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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/555,801	06/05/2000	WALTER STOEPLER	3232S-160414	1178
26694	7590	11/26/2003	EXAMINER	
VENABLE, BAETJER, HOWARD AND CIVILETTI, LLP			TRAN, HIEN THI	
P.O. BOX 34385			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20043-9998			1764	

DATE MAILED: 11/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

Office Action Summary	Application No.	Applicant(s)	
	09/555,801	STOEPLER ET AL.	
	Examiner	Art Unit	
	Hien Tran	1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/8/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

On page 13, line 1 it is unclear as to whether the width 12 is the same as to the diameter 12 set forth on page 11, line 2; in line 2 it is unclear as to whether the inside surface 5a is the same as to the inside surface 5 set forth on page 10, line 17.

Note that the terminology used in the specification and claim should be consistent to avoid confusion.

Appropriate correction is required.

2. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 28-32, 35-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 28 it is unclear as to what structural limitation applicants are attempting to recite as the claim appears to be conflict with claim 27, e.g. how can the successive longitudinal sections decrease in cross sectional diameter in the pressing direction if the pressing step occurs at both ends.

In claim 29, it is unclear as to what structural limitation applicants are attempting to recite as the claim appears to be conflict with claim 27, e.g. how can the tube section has a third longitudinal section located between the first and second longitudinal sections and having a third cross sectional diameter being narrower than the first and second sections while claim 1 requires that the successive longitudinal sections must decrease in cross sectional diameter in the pressing direction. See claim 35, 36, 37 likewise.

In claim 30, it is unclear as to what limitations applicants are attempting to recite and what is intended by "narrowed longitudinal sections" and "partial peripheral region". See claims 31-32, 38-39 likewise.

In claim 31, the dependency of the claim should be amended because it cannot depend on itself.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. The art area applicable to the instant invention is that of catalytic converter.

One of ordinary skill in this art is considered to have at least a B.S. degree, with additional education in the field and at least 5 years practical experience working in the art; is aware of the state of the art as shown by the references of record, to include those cited by applicants and the examiner (*ESSO Research & Engineering V Kahn & Co*, 183 USPQ 582 1974) and who is presumed to know something about the art apart from what references alone teach (*In re Bode*, 193 USPQ 12, (16) CCPA 1977); and who is motivated by economics to depart from the prior art to reduce costs consistent with the desired product characteristics. *In re Clinton* 188 USPQ 365, 367 (CCPA 1976) and *In re Thompson* 192 USPQ 275, 277 (CCPA 1976).

8. Claims 27, 29, 32-34, 37, 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noritake et al (4,347,219) in view of Dattge et al (5,413,766) and either JP 09-242533 or GB 1,473,219.

With respect to claims 27, 32-34, 40, Noritake et al discloses an apparatus and a method of producing said apparatus comprising: a housing consisting of a cylindrical tube section 1, an inflow funnel 2 and an outflow funnel 3; at least one monolith 8 arranged within the tube section 1; a gap between the monolith and the housing; and a positioning mat 9 with radial pre-stressing located in the gap space; wherein the tube section has an inside cross-sectional surface that changes in stages in the form of several longitudinal sections and wherein the inside surface of the longitudinal sections extends essentially parallel to the central longitudinal axis of the tube section 1.

The method and apparatus of Noritake et al are substantially the same as that of the instant claims, but fail to disclose the specific material for the positioning mat as claimed.

However, Dattge et al discloses that the use of a positioning mat comprising a mineral fiber mat with embedded mica is known in the art.

It would have been obvious to one having ordinary skill in the art to alternately select an appropriate material for the positioning mat of Noritake et al, such as the known mineral fiber mat with embedded mica as admitted in Dattge et al for the known and expected results of obtaining the same results in the absence of unexpected results and since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

The modified method and apparatus of Noritake et al are substantially the same as that of the instant claims, but fail to disclose whether the tube section may include successive longitudinal sections that decrease in cross sectional diameter in the pressing direction as claimed.

However, JP 09-242533 and GB 1,473,219 disclose that the sections of the monolith may be arranged according to the decrease in the inside cross-sectional surface.

It would have been obvious to one having ordinary skill in the art to alternately arrange the sections of the monolith of Noritake et al according to the decrease in the inside cross-sectional surface as taught by JP 09-242533 or GB 1,473,219 so as to obviate the disadvantage of high contact forces of deterioration in the elasticity of the mat.

With respect to claims 29, 37, Noritake et al discloses that the tube section having first and second longitudinal sections with first and second cross sectional diameters and a third longitudinal section arranged between the first and second longitudinal sections with a third cross sectional diameter, the third cross sectional diameter being narrower than the first and second cross sectional diameter (Figs 1-3).

9. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Noritake et al (4,347,219) in view of Dattge et al (5,413,766) and either JP 09-242533 or GB 1,473,219 as applied to claims 27, 29, 32-34, 37, 40 above and further in view of Otani et al (4,413,392).

Otani et al discloses that the monolith may be pressed in from each tube end of the tube section.

It would have been obvious to one having ordinary skill in the art to alternately press in the monolith from each tube end as taught by Otani et al in the modified method of Noritake et al as such is conventional in the art and no cause for patentability here.

10. Claims 30-31, 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noritake et al (4,347,219) in view of Dattge et al (5,413,766) and either JP 09-242533 or GB 1,473,219 as applied to claims 27, 29, 32-34, 37, 40 above and further in view of JP 09-112260 (corresponding to Tosa et al (5,888,457)).

The modified method and apparatus of Noritake et al are substantially the same as that of the instant claims, but fail to disclose whether the narrowed section may extend only over one peripheral region than in another.

However, Tosa et al discloses provision of a mat in which a compressed section extends only over one peripheral region than in another (Fig. 9).

It would have been obvious to one having ordinary skill in the art to construct the mat in the modified method and apparatus of Noritake et al so as a compressed section extends only over one peripheral region than in another, so as to decrease the non-uniform degree of the surface pressure on the monolith and provide compensation thereof as taught by Tosa et al.

11. Claims 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noritake et al (4,347,219) in view of Dattge et al (5,413,766) and either JP 09-242533 or GB 1,473,219 as applied to claims 27, 29, 32-34, 37, 40 above and further in view of DE 3,638,050.

Noritake et al discloses that the narrowed section encircles the middle portion of the monolith.

However, DE 3,638,050 discloses that the narrowed section may encircle the frontal region or the middle portion of the monolith.

It would have been obvious to one having ordinary skill in the art to alternately construct the modified apparatus of Noritake et al so as the narrowed section encircles the frontal portion of the monolith since positioning the parts of the apparatus is no more than a design choice, and well within the knowledge of one skilled in the art as evidenced by DE 3,638,050 and since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Response to Arguments

12. Applicant's arguments filed 9/8/03 have been fully considered but they are not persuasive.

In response to applicant's argument that the goal of the present invention is to increase the holding force exerted on the monolith, the fact that applicant has recognized another advantage

Art Unit: 1764

which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

In response to applicant's argument that it would not possible to combine the JP and GB reference since the instant invention uses a graduated casing as opposed to a continuous tapered toward the back end in flow direction. Such contention is not persuasive as one having ordinary skill in the art would be able to provide some adjustment when modifying the tube section of Noritake et al. Note that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 1764

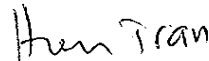
however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien Tran whose telephone number is (703) 308-4253 **. The examiner can normally be reached on Tuesday-Friday from 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (703) 308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0661.

***As of December 10, 2003, the telephone number will be changed to 571-272-1454.*



HT
November 24, 2003

Hien Tran
Primary Examiner
Art Unit 1764